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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,937	08/21/2003	Jae Seung Lee	1594.1272	7379

21171 7590 03/15/2006

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WASHINGTON, DC 20005

EXAMINER
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DOERRLER, WILLIAM CHARLES

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/644,937	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> William C. Doerrler	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 and 50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 and 50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,10 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Constantini et al (3,178,902).

Constantini et al '902 shows in figure 9 a refrigerator having an air cooling section extending up the rear of the housing with a front -top mounted machine room. When the coling section is connected, the cabinet includes the cooling section.

Claims 1,2,10 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Bauman et al (6,070,424).

Bauman et al shows in figure 1 a refrigerator having an air cooling section extending up the rear of the housing with a front -top mounted machine room.

Claims 1,2,3,10 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Maynard et al (3,712,078).

Maynard et al shows in figure 6 a refrigerator having an air cooling section extending up the rear of the housing with a front -top mounted machine room.

Claims 1,2,10,11 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Gidseg (4,776,182).

Gidseg shows in figures 1 and 3, a refrigerator having an integral rear extension which houses the evaporator and fan to circulate cold air, as well as a front mounted compressor compartment.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Maynard et al, Gidseg, Bauman et al or Constantini et al '902 in view of the European patent from the IDS (Watanabe, EP 1,174,666).

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Maynard et al, Gidseg, Bauman et al and Constantini et al '902 each disclose applicants' basic inventive concept, a refrigerator with a rear extension for the air cooling device and a front machine room, substantially as claimed with the exception of using a cross flow fan above the evaporator to provide the cold air flow. Watanabe shows this feature to be old in the refrigerator air flow art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Watanabe to modify any one of Gidseg, Bauman et al, Maynard et al or Constantini et al '902 by using a top mounted cross flow fan to provide sufficient cold air flow throughout the refrigerator compartment.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Maynard et al, Gidseg, Bauman et al or Constantini et al '902 in view of Silva (5,284,023)).

Maynard et al, Gidseg, Bauman et al and Constantini et al '902 each disclose applicants' basic inventive concept, a refrigerator with a rear extension for the air cooling device and a front machine room, substantially as claimed with the exception of using a hinged cover for the machine room. Silva shows this feature to be old in the refrigerator air flow art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Silva to modify any one of Gidseg, Bauman et al, Maynard et al or Constantini et al '902 by using a hinged cover for the compressor compartment to provide easy access for maintenance.

Claims 11-19,22,23,25-30,32-41,46,47 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Maynard et al, Gidseg, Bauman et al or Constantini et al '902 in view of Constantini et al (3,122,899). Maynard et al, Gidseg, Bauman et al and Constantini et al '902 each disclose applicants' basic inventive concept, a refrigerator with a rear extension for the air cooling device and a front machine room, substantially as claimed with the exception of providing an air cooling unit for both a freezer and a refrigerator. Constantini et al '899 shows this feature to be old in the top mounted machine room and air circulation device art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Constantini et al '899 to modify any one of Gidseg, Bauman et al, Maynard et al or Constantini et al '902 by using a top mounted air cooler for both a refrigerator and a freezer to provide efficient two temperature cooling for separate compartments. In regard to claims 14 and 16, figure 5 of Constantini et al '899 shows a partition plate separating air inlet 42 from air outlet 43.

Claims 20,21 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maynard et al, Gidseg, Bauman et al and Constantini et al '902 in view of Constantini et al '899 as applied to claims 12-19,22,23,25-30,32-41,46,47 and 50 above, and further in view of Montes.

Maynard et al, Gidseg, Bauman et al and Constantini et al '902, each as modified, disclose applicants' basic inventive concept, a freezer/refrigerator with an upper machine compartment used to provide cooling to an upper cooling air system which provides cold air to both the freezer and refrigerator, substantially as claimed with the

exception of using panels with interlocking tabs and grooves for the sides of the refrigerator. Montes shows this feature to be old in the insulated panel art. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention from the teaching of Montes to use interlocking panels for the sides of the refrigerator to provide a device which is quickly assembled, yet prevents the flow of air between panels.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maynard et al, Gidseg, Bauman et al and Constantini et al '902 in view of Constantini et al '899 as applied to claims 12-19,22,23,25-30,32-41,46,47 and 50 above, and further in view of Silva.

Maynard et al, Gidseg, Bauman et al and Constantini et al '902, each as modified, disclose applicants' basic inventive concept, a freezer/refrigerator with an upper machine compartment used to provide cooling to an upper cooling air system which provides cold air to both the freezer and refrigerator, substantially as claimed with the exception of using a cross flow fan. Silva shows this feature to be old in the refrigerator and freezer art. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention from the teaching of Silva to use a cross flow fan to provide sufficient airflow in a relatively flat outline.

### ***Response to Arguments***

Applicant's arguments filed 2-10-2006 have been fully considered but they are not persuasive. Constantini '902 shows a refrigerator with a cabinet with the rear of the cabinet containing an evaporator and fan and a machine compartment located in front

of the evaporator. The fact that the evaporator is removable from the bottom portion of the cabinet is moot since when the evaporator is attached, the top projection part defines an air cooling chamber therein such that the air cooling chamber extends upward from an upper portion of the storage compartment. Applicant has not claimed any structure in the rejected claims which is not shown by Constantini '902.

The separable nature of the cabinet is not precluded by applicants' claim.

Bauman et al do not state that portion 20 constitutes part of the cabinet. However it is clear from figure 1 that portion 20 forms the top of the cabinet and is direct airflow with the entire cabinet.

The cooling unit of Maynard is designed to be in place as the top of the cabinet during use. The fact that it can be separated does not change the fact that it discloses a refrigerator having a cabinet with a top projection which contains the evaporator and a front portion containing the compressor and condenser.

Likewise, once Gidseg's refrigeration module 10 is installed on the cabinet, the rear portion of the module becomes a top projection part. The fact that the top projection part is in fluid contact with the lower part of the cabinet through an air inlet and outlet is seen as immaterial. There is nothing in the rejected claims that precludes being in fluid flow with the cabinet through two large openings. It is noted that applicants' invention, as shown in figures 1 and 3 also has the upper portion in fluid contact with the lower portion only through an air inlet and outlet.

Applicants' remarks concerning the 103 rejections merely state that the top projection is not found in the base references. This is not the case. All of the cited references show



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a rear projection to the cabinet with airflow through the projection to cool the remainder of the cabinet. None of the cited references are identical to applicants' disclosure, but this is immaterial. All of the base references show the upper projection at the rear of the cabinet. The projections may not be integrally molded with the rest of the cabinet, but this has never been claimed, and would merely change the 102 rejections using the base references to 103 rejections as the making integral what is shown as discrete, connected pieces is generally considered obvious to a ordinary practitioner in the art.

### ***Conclusion***

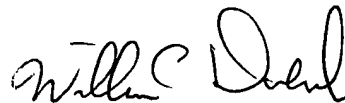
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Doerrler whose telephone number is (571) 272-4807. The examiner can normally be reached on Monday-Friday 6:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William C Doerrler  
Primary Examiner  
Art Unit 3744

WCD